

a step for transmitting acoustic energy into said tissue including said blood vessel;
a step for receiving reflections of said acoustic energy from said tissue and said blood vessel;
a step for producing basebanded data from at least a portion of said received reflections;
a step for developing an envelope squared representation of said baseband data;
a step for applying a depth-dependent gain to at least a portion of said envelope squared representation;-and
a step for identifying said blood vessel based at least in part on an output of said step of applying; and
a step for positioning said blood pressure sensor above said identified blood vessel.